

A power control system for a wireless communications system adjusts the transmit power of a wireless transmitter in relation to a number of acknowledgments expected for radio transmissions over a wireless link. For example, a wireless unit monitors the number of acknowledgments it receives (or fails to receive) for radio packets that the wireless unit transmitted over the wireless link. The wireless unit determines the number of acknowledgments lost in relation to the number of acknowledgments expected to be received by the wireless unit. The number of acknowledgments expected by the wireless unit can be based on the number of radio packets transmitted by the wireless unit. If the number of ACKs lost/ number of ACKs expected is greater than a first threshold, the wireless unit increases the transmit power level. If the number of ACKs lost/ the number of ACKs expected is below a second threshold, the wireless unit decreases the transmit power level.